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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,383

04/29/2005

Johannes Antonius Reinders

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EXAMINER

FLANIGAN, ALLEN J

ART UNIT

PAPER NUMBER

3744

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06/02/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,383	<b>Applicant(s)</b> REINDERS, JOHANNES ANTONIUS	
	<b>Examiner</b> Allen J. Flanigan	<b>Art Unit</b> 3744	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) 1-6,10-14,16-18 and 20-24 is/are pending in the application.  
4a) Of the above claim(s) 13,14,16-18 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6,10-12 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

Claims 13, 14, 16-18, and 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention or species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/30/2008.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-6, 10, 11, 21, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasutake et al. in view of Lamich.

Please see the comments made in regard to the above rejection in the previous Office action.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yasutake et al. in view of Lamich as applied to claim 21 above, and further in view of Sakai.

Please see the comments made in regard to the above rejection in the previous Office action.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yasutake et al. in view of Lamich as applied to claim 11 above, and further in view of Takai et al.

Please see the comments made in regard to the above rejection in the previous Office action.

Applicant's arguments filed 3/26/2009 have been fully considered but they are not persuasive.

Applicants base the entirety of their response to the rejection on arguing the patentability of claim 1, urging that the rejection of claim 1 based on the teachings of Yasutake et al. in view of Lamich is improper. The comments made by the applicant are unpersuasive, amounting to either arguments based on pointing out that Yasutake et al. by itself does not suggest the claimed structure, or arguments that are not commensurate in scope with the claims, or arguments that are based on mere speculation regarding the references, and implausible suppositions regarding the inability of one skilled in the art to combine the teachings of these references. Applicant states,

“it is not apparent how the skilled reader would achieve this substitution [of the corrugated fins of Lamich for the fins 11 of Yasutake et al.]. It appears from Yasutake [*sic*] that the particular structure of spacer 8 is essential to the construction of that device. It is *conjectured* that the essentiality lies in the apparently stiff nature of the structure providing adequate support to withstand the forces of manufacturing of the device.” (italics added)

The manner in which such a substitution could be achieved is clearly illustrated in Yasutake et al., who show that where a corrugated fin is employed, a separate spacer 12 is provided to supply the edge reinforcement and sealing of the passages for heat exchange fluid. Applicant's response further states:

“It is noted that despite Yasutake [*sic*] already describing corrugated fins, none of the embodiments even hint at the use of such corrugated fins on both sides of a heat exchange wall. It would thus appear that in Yasutake [*sic*] the use of corrugated fins on both sides of the heat exchange wall was inappropriate, perhaps because of difficulties in relying on stiffness of the spacer during manufacturing.”

This is a combination of two unpersuasive arguments; arguing the references individually, and an unsubstantiated allegation that the references teach away from the proposed combination. See MPEP 2145 (IV), also MPEP 2145 (X)(D)(1)<sup>1</sup>.

Finally, applicant states: “Lamich also does not describe how a single laminate can be provided with corrugated fins connected to both its first and second surfaces under heat and pressure.” This argument is not commensurate in scope with the claims; the claims are not directed to a method of making a heat exchanger core “under heat and pressure”, but rather to a heat exchanger structure.

The teachings of Yasutake et al. and Lamich are readily combinable, being drawn from the same art, and essentially concerning the same sort of device, i.e. a cross flow heat exchanger with fins provided in the flow passages for both fluids.

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This section notes that “the prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed....” In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). Similarly, the fact that a reference teaches one variation of fin configuration rather than another well known variation obviously does not constitute a teaching away from the use of such well known variation.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The remaining references concern heat exchangers employing corrugate fins and/or porous layers provided on fins.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (571) 272-4910. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Allen J. Flanigan/  
Primary Examiner, Art Unit 3744